

## 【Scientific Program】

Poster Oral Session (Room A: Urban Tech Hall, December 5th, 9:30~12:30)

Chair Atsushi Mizukoshi (9:30~10:30)

- P-01 Numerical modeling and prediction of photocatalytic decomposition effect for IAQ control - Performance test for evaluating the reduction of toluene concentrations by photocatalytic building Material in rectangular-shaped 20L test chamber –  
Eunsu Lim<sup>1</sup>, Kazuhide Itoh<sup>2</sup>  
<sup>1</sup>Toyo University, <sup>2</sup>Kyusyu University
- P-02 The comparison of diffusive samplers with auto analyzer (ozone, nitrogen dioxide)  
Hironari Sakamoto<sup>1</sup>, Shigehisa Uchiyama<sup>2</sup>, Kanae Bekki<sup>2</sup>, Yohei Inaba<sup>2</sup>, Naoki Kunugita<sup>2</sup>  
<sup>1</sup>Chiba City Institute of Health and Environment, <sup>2</sup>National Institute of Public Health
- P-03 Identification and seasonal variation of indoor air pollutants at public buildings in Yokohama  
Kazuhiro Takatsu<sup>1</sup>, Reiko Tanaka<sup>1</sup>, Kiyoshi Sakai<sup>1</sup>, Katsura Matsuno<sup>1</sup>  
<sup>1</sup>Yokohama City Institute of Public Health
- P-04 Measurement of gaseous chemical compounds in public buildings and private houses in Yokohama during the winter and summer seasons  
Reiko Tanaka<sup>1,2</sup>, Kiyoshi Sakai<sup>1</sup>, Kazuhiro Takatsu<sup>1</sup>, Youhei Inaba<sup>2</sup>, Shigehisa Uchiyama<sup>2</sup>, Naoki Kunugita<sup>2</sup>  
<sup>1</sup>Yokohama City Institute of Public Health, <sup>2</sup>National Institute of Public Health
- P-05 A study on variation of ammonia emitted from human skin surface within a day  
Shota Furukawa<sup>1</sup>, Keita Kimura<sup>1</sup>, Minami Takahashi<sup>1</sup>, Yoshika Sekine<sup>1</sup>, Kazuo Umezawa<sup>2</sup>, Satomi Asai<sup>2</sup>, Hayato Miyachi<sup>2</sup>  
<sup>1</sup>School of Science, Tokai University, <sup>2</sup>School of Medicine, Tokai University
- P-06 A study on clinical application and measurement of air concentrations of biogases emanating from burn patients  
Keita Kimura<sup>1</sup>, Minami Takahashi<sup>1</sup>, Shota Furukawa<sup>1</sup>, Yoshika Sekine<sup>1</sup>, Takashi Tsukamoto<sup>2</sup>, Takahiro Ozano<sup>2</sup>, Kazuo Umezawa<sup>3</sup>, Satomi Asai<sup>3</sup>, Hayato Miyachi<sup>3</sup>  
<sup>1</sup>School of Science, Tokai University, <sup>2</sup>Penta-Ocean Construction Co., Ltd., <sup>3</sup>School of Medicine, Tokai University
- P-07 Long-term monitoring of ammonia and trimethylamine in indoor air using a diffusive sampling device  
Tomomi Yamada<sup>1,2</sup>, Shigehisa Uchiyama<sup>1</sup>, Kanae Bekki<sup>1</sup>, Yohei Inaba<sup>1</sup>, Naoki Kunugita<sup>1</sup>  
<sup>1</sup>National Institute of Public Health, <sup>2</sup>Chiba University
- P-08 A study on emission behavior of acetic acid from human skin surface during sleep  
Minami Takahashi<sup>1</sup>, Keita Kimura<sup>1</sup>, Shota Furukawa<sup>1</sup>, Yoshika Sekine<sup>1</sup>, Kazuo Umezawa<sup>2</sup>, Satomi Asai<sup>2</sup>, Hayato Miyachi<sup>2</sup>  
<sup>1</sup>School of Science, Tokai University, <sup>2</sup>School of Medicine, Tokai University

- P-09 Determination of acrolein in air using a silica cartridge impregnated with trans-1,2-bis-(2-pyridyl)ethylene and 2,4-dinitrophenylhydrazine  
Yui Senoo <sup>1,2</sup>, Shigehisa Uchiyama <sup>1</sup>, Kanae Bekki <sup>1</sup>, Yohei Inaba <sup>1</sup>, Naoki Kunugita <sup>1</sup>, Hideki Nakagome <sup>2</sup>  
<sup>1</sup>National Institute of Public Health, <sup>2</sup>Chiba University
- P-10 Measurement of hydrazines in air using a filter pad impregnated with pyridine-2-aldehyde  
Rina Izu <sup>1,2</sup>, Shigehisa Uchiyama <sup>1</sup>, Kanae Bekki <sup>1</sup>, Yohei Inaba <sup>1</sup>, Naoki Kunugita <sup>1</sup>, Hideki Nakagome <sup>2</sup>  
<sup>1</sup>National Institute of Public Health, <sup>2</sup>Chiba University
- P-11 Long-term sampling method of gaseous chemical substance using passive sampler  
Kanae Bekki <sup>1</sup>, Shigehisa Uchiyama <sup>1</sup>, Tomomi Yamada <sup>1</sup>, Yohei Inaba <sup>1</sup>, Naoki kunugita <sup>1</sup>  
<sup>1</sup>National Institute of Public Health
- P-12 Determination of volatile organic compounds in air using a head-space gas chromatography  
Kanae Bekki <sup>1</sup>, Shigehisa Uchiyama <sup>1</sup>, Takuya Tomizawa <sup>1</sup>, Yohei Inaba <sup>1</sup>, Naoki Kunugita <sup>1</sup>  
<sup>1</sup>National Institute of Public Health
- P-13 Influence of sorptive building materials on Inhaled air quality  
Janghoo Seo <sup>1</sup>, Seonghyon Park <sup>1</sup>  
<sup>1</sup>Kookmin University
- P-14 Development for next generation desiccant air conditioning system removable gas contaminant  
Kanae Maruyama <sup>1</sup>, Koji Inoue <sup>1</sup>, Hiroshi Okano <sup>1</sup>  
<sup>1</sup>Seibu Giken Co.,Ltd.
- P-15 Emission rates and substances from low volatile organic compounds (VOCs) paints  
Norimichi Suzuki <sup>1</sup>, Masamichi Hanazato <sup>1</sup>, Chie Koga <sup>2</sup>, Hiroshi Seto <sup>1</sup>, Chisato Mori <sup>1,2</sup>  
<sup>1</sup>Center for Preventive Medical Sciences, Chiba University, <sup>2</sup>Graduate School of Medicine, Chiba University
- P-16 Commercial space design for reduction and monitoring of volatile organic compounds in indoor air  
Masamichi Hanazato <sup>1</sup>, Hiroki Suzuki <sup>2</sup>, Norimichi Suzuki <sup>1</sup>, Chie Koga <sup>1,3</sup>, Hiroshi Seto <sup>1</sup>, Chisato Mori <sup>1,3</sup>  
<sup>1</sup>Center for Preventive Medical Sciences, Chiba University, <sup>2</sup>Graduate School of Engineering, Chiba University, <sup>3</sup>Graduate School of Medicine, Chiba University
- P-17 Aging variation in indoor air quality in Chemiless Town  
Hiroko Nakaoka <sup>1</sup>, Hiroshi Seto <sup>1</sup>, Emiko Todaka <sup>1</sup>, Masamichi Hanazato <sup>1</sup>, Michiko Shimoda <sup>1</sup>, Chisato Mori <sup>1,2</sup>  
<sup>1</sup>Center for Preventive Medical Sciences, Chiba University, <sup>2</sup>Department of Bioenvironmental Medicine, Graduate School of Medicine, Chiba University
- P-18 Study on the mechanism of indoor air pollution with trihalomethanes contained in tap water  
Takuya Sato <sup>1</sup>, Kimika Kaneshia <sup>1</sup>, Yukihiro Takagi <sup>1</sup>, Daisuke Nakajima <sup>2</sup>, Kazuho Inaba <sup>1</sup>, Sumio Goto <sup>1</sup>  
<sup>1</sup>Azabu University, <sup>2</sup>National Institute for Environmental Studies

- P-19 Odor complaints occurred in rooms using wooden board painted by vegetable oil products and analysis of indoor air chemicals  
Masae Otake<sup>1</sup>, Hiroko Nakaoka<sup>1</sup>, Emiko Todaka<sup>1</sup>, Masamichi Hanazato<sup>1</sup>, Hiroshi Seto<sup>1</sup>, Chisato Mori<sup>1,2</sup>  
<sup>1</sup>Center for Preventive Medical Sciences, Chiba University, <sup>2</sup>Department of Bioenvironmental Medicine, Graduate School of Medicine, Chiba University
- P-20 A study on the emission and behavior of NOx at central Tokyo based on Environmental Forensics  
Kazuhiro Toki<sup>1</sup>, Yoshika Sekine<sup>2</sup>, Akihiro Takemasa<sup>1</sup>, Ayano Azuma<sup>2</sup>, Kaoru Sagae<sup>1</sup>, Rina Kobayashi<sup>1</sup>  
<sup>1</sup>Tokai University Bosei Senior High School, <sup>2</sup>Graduate School of Science, Tokai University
- P-21 Field measurements of indoor aldehydes and ketones in public transportations at high school students' commuting time  
Yoshiki Hamada<sup>1</sup>, Ayako Ikeda<sup>1</sup>, Shiro Ikeda<sup>2</sup>, Yoshika Sekine<sup>3</sup>  
<sup>1</sup>Hachioji Jissen High School Department of Chemistry, <sup>2</sup>Gastec Corporation, <sup>3</sup>School of Science, Tokai University
- P-22 Study on the indoor radon concentration of elementary school in Korea  
Bu-Soon Son<sup>1</sup>, Myung-Kyu Park<sup>1</sup>, Chae-Hyeok Lee<sup>1</sup>, Kyung-Byuck Jang<sup>1</sup>, Tae-Woong Chung<sup>2</sup>  
<sup>1</sup>Soonchunhyang University, <sup>2</sup>Sejong University
- P-23 Emission characteristics and elution characteristics to hydrophobic film of chemical compounds from floor coverings  
Yukio Aoki<sup>1</sup>  
<sup>1</sup>Hyogo Prefectural Institute of Public Health and Consumer Sciences
- P-24 Development of the emission test chamber  
Norikazu Kobayashi<sup>1</sup>, Huaipeng Tang<sup>1</sup>, Mitsuo Shibamoto<sup>2</sup>, Yoshinori Kawai<sup>2</sup>  
<sup>1</sup>Shinryo Corporation, <sup>2</sup>Shinryo Kogyo Co.Ltd
- P-25 Evaluation of the passive sampler in the chamber - effects of temperature, relative humidity and wind velocity  
Zhiwei Wang<sup>1</sup>, Qi Wang<sup>1</sup>, Tomoyuki Naoi<sup>1</sup>, Yuichi Miyake<sup>1</sup>, Takashi Amagai<sup>1</sup>, Yasuhiro Fukushima<sup>2</sup>, Yoshihiro Suzuki<sup>2</sup>, Takanori Enomoto<sup>2</sup>  
<sup>1</sup>University of Shizuoka, <sup>2</sup>Sibata Scientific Technology LTD.
- P-26 Determination of phosphate flame retardant indoors  
Hayato Nakayama<sup>1</sup>, Yuichi Miyake<sup>1</sup>, Takashi Amagai<sup>1</sup>  
<sup>1</sup>University of Shizuoka
- P-27 The storage methods of DNPH passive sampler after collecting aldehydes  
Xiwen Luo<sup>1</sup>, Qi Wang<sup>1</sup>, Tomoyuki Naoi<sup>1</sup>, Yuichi Miyake<sup>1</sup>, Takashi Amagai<sup>1</sup>  
<sup>1</sup>University of Shizuoka
- P-28 Measurement of the dermal exposure to phthalate esters  
Naohide Shinohara<sup>1</sup>, Mayumi Uchiyama<sup>2</sup>, Hirohumi Tanaka<sup>2</sup>  
<sup>1</sup>National Institute of Advanced Industrial Science and Technology (AIST)  
<sup>2</sup>MC Evolve Technologies Corporation

- P-29 Development of the measuring method for the total volatile organic compounds using the passive sampler  
Tomomi Yamada <sup>1,2</sup>, Hiroshi Seto <sup>2</sup>, Morohiro Chiyoda <sup>1</sup>, Takahiro Shimizu <sup>1</sup>,  
Tsuyoshi Imazawa <sup>1</sup>, Shingo Yanai <sup>1</sup>  
<sup>1</sup>Tokyo Kenbikyo-in Foundation, <sup>2</sup>Chiba University

**Chair Yoji Yamaguchi (10:30~11:30)**

- P-30 High performance liquid chromatograph mass spectrometer analysis of glyoxal in air  
Tsutomu Yoshida <sup>1</sup>, Shigehisa Uchiyama <sup>2</sup>, Yohei Inaba <sup>2</sup>, Yutaka Takeuchi <sup>1</sup>, Keiji Miyamoto <sup>1</sup>,  
Jun Miyama <sup>1</sup>, Naoki kunugita <sup>2</sup>  
<sup>1</sup>Sapporo City Institute of Public Health, <sup>2</sup>National Institute of Public Health
- P-31 Passive sampling for total-volatile organic compounds (TVOCs) in indoor air (Part 2)  
Takahiro Ishizaka <sup>1</sup>, Shiniciro Yamada <sup>1</sup>, Sun Yichen <sup>1</sup>, Ayato Kawashima <sup>1</sup>  
<sup>1</sup>Faculty of Agriculture, Ehime University
- P-32 Determination of nicotine in environmental tobacco smoke by nicotine passive sampler/HPLC  
method  
Huan Bai <sup>1</sup>, Yuichi Miyake <sup>1</sup>, Takashi Amagai <sup>1</sup>  
<sup>1</sup>University of Shizuoka
- P-33 Determination method of VOCs in indoor air using SPME  
Natsuho Gokita <sup>1</sup>, Toshiro Matsumura <sup>1</sup>, Yoicni Shitanaka <sup>2</sup>, Kenji Yoshikawa <sup>1</sup>,  
Yukitoki Morita <sup>1</sup>, Akio Sakuragawa <sup>1</sup>  
<sup>1</sup>Nihon University, College of Science and Technology  
<sup>2</sup>Takamizawa analytical chemistry laboratory, Inc.
- P-34 Determination method of VOCs in human breath sample using SPME-GC/MS  
- As biomarkers of lung cancer -  
Tomo Okanda <sup>1</sup>, Toshiro Matsumura <sup>1</sup>, Kenji Yoshikawa <sup>1</sup>, Yukitoki Morita <sup>1</sup>, Akio Sakuragawa  
<sup>1</sup>  
<sup>1</sup>College of Science and Technology, Nihon University
- P-35 Particulate and gaseous semi-volatile organic compounds in indoor and outdoor air  
Toshiko Tanaka-Kagawa <sup>1</sup>, Tahara Maiko <sup>1</sup>, Yoko Kawahara <sup>1</sup>, Hitoshi Uemura <sup>2</sup>, Ikue Saito <sup>3</sup>,  
Shinji Takeuchi <sup>4</sup>, Yoshiaki Ikarashi <sup>1</sup>, Hideto Jinno <sup>1</sup>  
<sup>1</sup>National Institute of Health Sciences Kanagawa Prefectural, <sup>2</sup>Institute of Public Health Tokyo  
Metropolitan, <sup>3</sup>Institute of Public Health Hokkaido, <sup>4</sup>Institute of Public Health
- P-36 Random sampling survey of indoor air aldehydes and total volatile organic compounds in Kanto  
region, Japan  
Hideto Jinno <sup>1</sup>, Toshiko Tanaka-Kagawa <sup>1</sup>, Maiko Tahara <sup>1</sup>, Yoko Kawahara <sup>1</sup>, Kaori Mayumi <sup>1</sup>,  
Yoshiaki Ikarashi <sup>1</sup>  
<sup>1</sup>National Institute of Health Sciences
- P-37 Simultaneous determination for 26 semi-volatile organic compounds in indoor air by gas  
chromatography/tandem mass spectrometry  
Maiko Tahara <sup>1</sup>, Toshiko Tanaka-Kagawa <sup>1</sup>, Yoko Kawahara <sup>1</sup>, Yoshiaki Ikarashi <sup>1</sup>,  
Hideto Jinno <sup>1</sup>  
<sup>1</sup>National Institute of Health Sciences

- P-38 Detection of neonicotinoid insecticide in the dust samples from elementary schools using LC-TOF-MS  
Naoki Tamura<sup>1</sup>, Masayoshi Ichiba<sup>2</sup>, Takashi Someya<sup>1</sup>, Daisuke Ueno<sup>1</sup>  
<sup>1</sup>Saga University graduate school of agriculture, <sup>2</sup>Faculty of Medicine Saga University
- P-39 Analysis of odor compounds in environmental tobacco smoke (ETS)  
Masahiro Oka<sup>1</sup>, Shuhei Nagahashi<sup>1</sup>, Kaori Imi<sup>1</sup>, Naoki Mizoguchi<sup>1</sup>, Keiichi Arashidani<sup>2</sup>, Hidetaka Matsubara<sup>3</sup>, Hiroshi Sato<sup>1</sup>  
<sup>1</sup>Faculty of Pharmaceutical Sciences, Nagasaki International University, <sup>2</sup>University of Occupational and Environmental Health, <sup>3</sup>Chuken Laboratory for Life and Environment
- P-40 Physiological and psychological effect of the rosemary aroma on a typing work  
Susumu Sekiguchi<sup>1</sup>, Tomomi Suginuma<sup>1</sup>, Rina Yoshikawa<sup>1</sup>, Miki Kikuchi<sup>1</sup>, Hitomi Yabuki<sup>1</sup>, Shiho Watanabe<sup>1</sup>, Atsushi Sato<sup>2</sup>  
<sup>1</sup>Department of food and nutrition, Koriyama Women's University  
<sup>2</sup>Department of Architecture, Oyama National College of Technology
- P-41 Deodorization technology on continuous high density NH<sub>3</sub> exhausted from the animal experimental room (1)  
Hideo Uzuhashi<sup>1</sup>, Naoki Fukuda<sup>2</sup>, Kazuo Owada<sup>2</sup>, Takeshi Ochiai<sup>2</sup>, Yuji Hayashi<sup>3</sup>  
<sup>1</sup>Yamanashi University, UNBEC, <sup>2</sup>Yamagata University Medical Division Animal Experimental Center, <sup>3</sup>Im'PACT World Ltd.
- P-42 Effect of malodorous environment on motion and mental fatigue  
Hiromi Yamada<sup>1,2</sup>, Motoya Hayashi<sup>2</sup>  
<sup>1</sup>Matsue College of Technology, <sup>2</sup>National Institute of Public Health
- P-43 Influence of joint mortars and ammonia-producing bacteria to ammonia emission  
Tamami Kawasaki<sup>1</sup>, Tomoyoshi Ushio<sup>1</sup>, Takashi Kyotani<sup>1</sup>  
<sup>1</sup>Railway Technical Research Institute, Biotechnology
- P-44 Decomposition of low-concentration formaldehyde by photocatalyst substrate produced by electrostatic atomization  
Shota Yazawa<sup>1</sup>, Tomonari Tsurumi<sup>1</sup>, Yusuke Kudo<sup>1</sup>, Tetsuro Otsuka<sup>1</sup>, Junji Koido<sup>1</sup>  
<sup>1</sup>Nihon University
- P-45 Development of ETS and odor removal system III sound level evaluation of quasi-office equipped with a compact smoking booth  
Torahiko Saeki<sup>1</sup>, Shuji Shiraki<sup>1</sup>, Yasuhiro Maeda<sup>1</sup>, Huaipeng Tang<sup>1</sup>, Miyuki Niguchi<sup>2</sup>, Atsushi Mizukoshi<sup>3</sup>, Yukio Yanagisawa<sup>4</sup>  
<sup>1</sup>Shinryo Corporation, <sup>2</sup>Seikei University, <sup>3</sup>Kinki University, <sup>4</sup>The University of Tokyo
- P-46 Evaluation of odor removal efficiency by solid materials  
Hitomi Kimura<sup>1</sup>, Miyuki Noguchi<sup>1</sup>, Motoki Inoue<sup>1</sup>, Akihiro Yamasaki<sup>1</sup>  
<sup>1</sup>Seikei University, Faculty of Science and Technology
- P-47 Investigation of chemical substances emitted from incenses  
Aya Onuki<sup>1</sup>, Mayu Hishiki<sup>1</sup>, Ikue Saito<sup>1</sup>, Mitsugu Hosaka<sup>1</sup>, Dai Nakae<sup>1</sup>  
<sup>1</sup>Tokyo Metropolitan Institute of Public Health

- P-48 Review of exposure factors about dermal adsorption of SVOC in consumer products  
Atsushi Mizukoshi<sup>1</sup>, Kenichi Azuma<sup>1</sup>  
<sup>1</sup>Kinki University
- P-49 Neurotoxicity of house dust determined by the inhibition action against acetylcholinesterase activity  
Yoko Nakashima<sup>1</sup>, Aki Mizushima<sup>1</sup>, Shoko Fukuda<sup>1</sup>, Seisaku Yoshida<sup>1</sup>  
<sup>1</sup>Mukogawa Woman's University
- P-50 Biomarkers for monitoring exposure to fluorine-containing *pyrethroids*, *transfluthrin*, *profluthrin* and *metofluthrin*: urinary excretion kinetics of their metabolites in rats  
Toshiaki Yoshida<sup>1</sup>  
<sup>1</sup>Osaka Prefectural Institute of Public Health
- P-51 Assessment of exposure to radioactive cesium via indoor dust ingestion  
Mai Takagi<sup>1</sup>, Atsushi Tanaka<sup>1</sup>, Yuko Kanda<sup>1</sup>, Taeko Doi<sup>1</sup>, Yoichi Tao<sup>2</sup>, Muneo Kanno<sup>2</sup>, F. Shoji Nakayama<sup>1</sup>  
<sup>1</sup>National Institute for Environmental Studies, <sup>2</sup>Resurrection of Fukushima
- P-52 A design tool for saving energy in houses for survivors of the great east Japan earthquake  
Motoya Hayashi<sup>1</sup>, Yoshinori Honma<sup>2</sup>, Hiroshi Yoshino<sup>3</sup>  
<sup>1</sup>National Institute of Public Health, <sup>2</sup>Iwate Prefectural University, <sup>3</sup>Tohoku University
- P-53 Development of an environmental information visualization system for cohousing  
Yusuke Nakajima<sup>1</sup>  
<sup>1</sup>Kogakuin University
- P-54 The status of environment and health management of buildings  
Kazumi Hojo<sup>1</sup>, U Yanagi<sup>1</sup>, Youta Shirai<sup>1</sup>, Naoki Kagi<sup>2</sup>, Kenichi Azuma<sup>3</sup>, Hoon Kim<sup>4</sup>, Haruki Osawa<sup>4</sup>  
<sup>1</sup>Kogakuin University, <sup>2</sup>Tokyo Institute of Technology, <sup>3</sup>Kinki University, <sup>4</sup>National Institute of Public Health
- P-55 Environmental assessment at clean room in the cell processing center by instantaneous microbial detection system  
Futoshi Ishikawa<sup>1</sup>, Tadayoshi Uchida<sup>3</sup>, Akira Matsuda<sup>2</sup>, Kiyoshi Mochizuki<sup>4</sup>, Michiyo Osono<sup>1</sup>, Sadatoshi Sakuma<sup>1</sup>, Tsuneya Ohno<sup>1,5,6</sup>  
<sup>1</sup>Cell-therapy Technology Institute, Inc., <sup>2</sup>Azbil Corporation, <sup>3</sup>Bio Nano Clean, LLC, <sup>4</sup>Xpro Associates, <sup>5</sup>Jikei University School of Medicine, <sup>6</sup>Actti Clinic
- P-56 Fixation and luminescence to a fibroin film of *Allivibrio fischeri*  
Chinatsu Nagahara<sup>1</sup>, Hitomi Kuwahara<sup>1</sup>, Junko Ninomiya<sup>1</sup>, Hiroshi Morita<sup>2</sup>  
<sup>1</sup>Graduate School of Environmental Engineering, The University of Kitakyushu  
<sup>2</sup>Faculty of Environmental Engineering, The University of Kitakyushu
- P-57 Luminescence inducer of marine luminous bacteria  
Hitomi Kuwahara<sup>1</sup>, Junko Ninomiya<sup>1</sup>, Hiroshi Morita<sup>2</sup>  
<sup>1</sup>Graduate School of Environmental Engineering, The University of Kitakyushu  
<sup>2</sup>Faculty of Environment Engineering, The University of Kitakyushu

- P-58 The influence that the environmental condition of bathroom gives to sporulation of *cladosporium*  
Hiroshi Yamagishi<sup>1</sup>, Mika Watanabe<sup>1</sup>, Atsushi Nakata<sup>1</sup>, Takayuki Hasegawa<sup>1</sup>,  
Kousuke Tanaka<sup>1</sup>, Hunjun Lee<sup>2</sup>  
<sup>1</sup>Living Care Research Laboratories, LION Corporation  
<sup>2</sup>Hygiene and Microbiology Research Center Corporation

**Chair Shoichi Morimoto (11:30~12:30)**

- P-59 Study on the antimicrobial effect of mixed digestive preparation include 2-mercaptopyridine  
n-oxide  
Kazuhiro Hashimoto<sup>1</sup>, Yuji Kawami<sup>1</sup>, Hisayuki Oda<sup>1</sup>, Tomohiro Ishida<sup>2</sup>,  
Kazuma Motohashi<sup>2</sup>, Hideyuki Seki<sup>2</sup>  
<sup>1</sup>Laboratory of Environmental Science, FCG Research Institute, Inc  
<sup>2</sup>Division of quality management, Pureson Co. Ltd.
- P-60 The current condition regarding bacterial pollution of three color pens that nurses use at hospital  
wards  
Hiroshi Ono<sup>1</sup>, Gou Asai<sup>1</sup>, Mikiko Nakamura<sup>1</sup>, Tooru Ide<sup>1</sup>, Yuki Matsuki<sup>2</sup>, Seiki Tadume<sup>3</sup>,  
Hideaki Matsuki<sup>3</sup>  
<sup>1</sup>Tokai University Hospital, <sup>2</sup>Tokai University Oiso Hospital, <sup>3</sup>Tokai University School of Health  
Sciences
- P-61 Development of decontamination technology using pneumatic spray nozzles  
Mizuyo Yotsumoto<sup>1</sup>, Kae Sueda<sup>1</sup>, Hiroki Ogata<sup>1</sup>, Hiroshi Ouga<sup>2</sup>, Kazukiyo Numata<sup>2</sup>,  
Narutoshi Mitsui<sup>2</sup>  
<sup>1</sup>Technical Research Institute, Obayashi Corporation, <sup>2</sup>Obayashi Corporation
- P-62 Baking property by the addition of fatty acid salt  
Yoshiaki Morinaga<sup>1</sup>, Hiroshi Morita<sup>2</sup>  
<sup>1</sup>Graduate School of Environmental Engineering, The University of Kitakyushu  
<sup>2</sup>Faculty of Environmental Engineering, The University of Kitakyushu
- P-63 The inhibitory action of fatty acid potassium on biofilm forming-microbe  
Manami Masuda<sup>1</sup>, Mariko Era<sup>1</sup>, Takayoshi Kawahara<sup>2</sup>, Takahide Kanyama<sup>2</sup>,  
Hiroshi Morita<sup>3</sup>  
<sup>1</sup>Graduate School of Environmental Engineering, The University of Kitakyushu, <sup>2</sup>Shabondama  
Soap Co., Ltd., Faculty of Environmental Engineering The University of Kitakyushu
- P-64 Antifungal effects of fatty acids and its alkali salts against *cladosporium cladosporioides*  
Yui Okuno<sup>1</sup>, Mariko Era<sup>1</sup>, Takayoshi Kawahara<sup>2</sup>, Takehide Kanyama<sup>2</sup>, Hiroshi Morita<sup>3</sup>  
<sup>1</sup>Graduate School of Environmental Engineering, The University of Kitakyushu, <sup>2</sup>Shabondama  
Soap Co., Ltd., <sup>3</sup>Faculty of Environmental Engineering, The University of Kitakyushu
- P-65 Inactivation of *penicillium* spp. by fatty acid salt and fatty acid  
Shiho Sakai<sup>1</sup>, Mariko Era<sup>1</sup>, Takayoshi Kawahara<sup>2</sup>, Takahide Kanyama<sup>2</sup>, Hiroshi Morita<sup>3</sup>  
<sup>1</sup>Graduate School of Environmental Engineering, The University of Kitakyushu, <sup>2</sup>Shabondama  
Soap Co., Ltd., <sup>3</sup>Faculty of Environment Engineering, The University of Kitakyushu

- P-66 Antifungal activity of fatty acid salts against *aspergillus* spp.  
Aya Tanaka<sup>1</sup>, Shiho Sakai<sup>2</sup>, Mariko Era<sup>2</sup>, Takayoshi Kawahara<sup>3</sup>, Takahide Kanyama<sup>3</sup>, Hiroshi Morita<sup>1</sup>  
<sup>1</sup>Faculty of Environment Engineering, The University of Kitakyushu, <sup>2</sup>Graduate School of Environmental Engineering, The University of Kitakyushu, <sup>3</sup>Shabondama Soap Co., Ltd.
- P-67 Control of fungus becoming the problem in living environment  
Mariko Era<sup>1</sup>, Takayoshi Kawahara<sup>2</sup>, Takahide Kanyama<sup>2</sup>, Hiroshi Morita<sup>3</sup>  
<sup>1</sup>Graduate School of Environmental Engineering. The University of Kitakyushu, <sup>2</sup>Shabondama Soap Co., Ltd, <sup>3</sup>Faculty of Environmental Engineering. The University of Kitakyushu
- P-68 The development of liquid koji for contamination control in shoshu making  
Saki Mikai<sup>1</sup>, Chika Miyazaki<sup>2</sup>, Junko Ninomiya<sup>1</sup>, Hiroshi Morita<sup>2</sup>  
<sup>1</sup>Graduate School of Environmental Engineering, The University of Kitakyushu  
<sup>2</sup>Faculty of Environment Engineering, The University of Kitakyushu
- P-69 Rapid detection system for environmental viruses  
Kei Takenaka<sup>1</sup>, Shigenori Togashi<sup>1</sup>, Ryo Miyake<sup>2</sup>, Takemasa Sakaguchi<sup>3</sup>, Michihiro Hide<sup>3</sup>  
<sup>1</sup>Hitachi, Ltd, <sup>2</sup>The University of Tokyo, <sup>3</sup>Hiroshima University
- P-70 Room Climates Promoting Fungal Growth in Storerooms in Reinforced Concrete Buildings  
Keiko Abe<sup>1</sup>  
<sup>1</sup>Institute of Environmental Biology
- P-71 Research for sources of airborne fungi in a practice room of a university  
Sumiyo Ishimatsu<sup>1</sup>, Seiko Tateno<sup>1</sup>, Mitsuo Hinoue<sup>1</sup>, Toru Ishidao<sup>1</sup>, Yukiko Fueta<sup>1</sup>, Hatsumi Taniguchi<sup>2</sup>, Hajime Hori<sup>1</sup>  
<sup>1</sup>University of Occupational and Environmental Health, School of Health Sciences  
<sup>2</sup>University of Occupational and Environmental Health, School of Medicine
- P-72 Seasonal change of fungal microflora on the surface of concrete walls  
Satoshi Saito<sup>1</sup>  
<sup>1</sup>Takenaka Corporation R&D Institute
- P-73 Concentration about the cleaning effect of an air-conditioning system  
Takuto Suzuki<sup>1</sup>, U Yanagi<sup>1</sup>, Riku Watanabe<sup>1</sup>  
<sup>1</sup>Kogakuin University
- P-74 Behavior of standard dust emission generated by walking action  
Nobuaki Urabe<sup>1</sup>, Kento Tamaki<sup>2</sup>, Hirokazu Kimura<sup>2</sup>  
<sup>1</sup>Graduate school of Shinshu University, <sup>2</sup>Shinshu University
- P-75 Secondary organic aerosol and moisture in indoor air  
Mio Arai<sup>1</sup>, Naoki Kagi<sup>1</sup>, Yuiko Yamane<sup>2</sup>, Shuji Fujii<sup>1</sup>, Norikazu Namiki<sup>3</sup>, Kazuhiko Sekiguchi<sup>4</sup>, Kenichi Azuma<sup>5</sup>, Yoshihide Suwa<sup>6</sup>, Hajime Tamura<sup>7</sup>  
<sup>1</sup>Tokyo Institute of Technology, <sup>2</sup>Taisei Corporation, <sup>3</sup>Kogakuin University, <sup>4</sup>Saitama University, <sup>5</sup>Kinki University, <sup>6</sup>Shibaura Institute of Technology, <sup>7</sup>Techno Ryowa LTD.
- P-76 Characterizing evolution of indoor secondary organic nano-sized aerosols (ISOAs) formed from volatile organic compounds (VOCs) derived from house-keeping wares  
Satsuki Suzuki<sup>1</sup>, Megumi Suzuki<sup>1</sup>, Norikazu Namiki<sup>1</sup>, Shuji Fujii<sup>2</sup>, Naoki Kagi<sup>2</sup>, Kazuhiko Sekiguchi<sup>3</sup>, Kenichi Azuma<sup>4</sup>, Hajime Tamura<sup>5</sup>, Yoshihide Suwa<sup>6</sup>



<sup>1</sup>Kogakuin University, <sup>2</sup>Tokyo Institute of Technology, <sup>3</sup>Saitama University, <sup>4</sup>Kinki University, <sup>5</sup>Techno Ryowa Ltd., <sup>6</sup>Shibaura Institute of Technology

- P-77 CFD evaluation of the airflow characteristics through crank-type passage to prevent tobacco smoke leakage from smoking room  
Hiroki Nakaae <sup>1</sup>, Takuya Asai <sup>1</sup>, Yukio Omata <sup>1</sup>  
<sup>1</sup>JAPAN TOBACCO INC.
- P-78 Field survey for radioactive contamination of various filters in the house equipped with the air-cleaning system  
Kazuki Sekiya <sup>1</sup>, Teruaki Mitamura <sup>2</sup>, Hiroki Harasawa <sup>3</sup>, Toyokichi Nara <sup>3</sup>  
<sup>1</sup>Maebashi Institute of Technology, <sup>2</sup>Faculty of Engineering, Maebashi Institute of Technology, <sup>3</sup>Harasawa Homes Co.,Ltd.
- P-79 Long-term observation of particulate matter 2.5 (PM2.5) at central Tokyo  
Jyunya Hanasaki <sup>1</sup>, Yoshika Sekine <sup>2</sup>, Akihiro Takemasa <sup>1</sup>, Shiori Ota <sup>2</sup>, Kanon Suganuma <sup>1</sup>, Yumi Sawada <sup>1</sup>  
<sup>1</sup>Tokai University Bosei Senior High School, <sup>2</sup>Graduate School of Science, Tokai University
- P-80 Accuracy enhancement of turbulent simulation for indoor air flow created by an air purifier and its effect on estimation of pollen removal efficiency  
Shotaro Nakagawa <sup>1</sup>, Akinori Hashimoto <sup>1</sup>, Toshiki Takahashi <sup>1</sup>, Makoto Goto <sup>2</sup>  
<sup>1</sup>Gunma University, <sup>2</sup>Niigata Polytechnic College
- P-81 Pollen removal performance by cooperative operation of two air purifiers  
Takumi Obata <sup>1</sup>, Akinori Hashimoto <sup>1</sup>, Toshiki Takahashi <sup>1</sup>, Makoto Goto <sup>2</sup>  
<sup>1</sup>Gunma University, <sup>2</sup>Niigata Polytechnic College
- P-82 Development of assist device with the aim of improving air-purifier performance  
Shunsuke Tokoi <sup>1</sup>, Akinori Hashimoto <sup>1</sup>, Toshiki Takahashi <sup>1</sup>, Makoto Goto <sup>2</sup>  
<sup>1</sup>Gunma University, <sup>2</sup>Niigata Polytechnic College
- P-83 Comparative survey for indoor environment in the house equipped with the air-cleaning system -comparison of measurement results before and after a move, existence or non-existence of the air-cleaning system-  
Kazuyuki Nagai <sup>1</sup>, Teruaki Mitamura <sup>2</sup>, Hiroki Harasawa <sup>3</sup>, Kunio Dobashi <sup>4</sup>  
<sup>1</sup>Graduate School of Engineering, Maebashi institute of Technology, <sup>2</sup>Faculty of Engineering Maebashi Institute of Technology, <sup>3</sup>Harasawa Homes Co., Ltd., <sup>4</sup>Gunma University
- P-84 Measurement of oxidative stress of airborne particulate matter by DTT Assay  
Shiori Ota <sup>1</sup>, Yoshika Sekine <sup>1</sup>, Yuri Ohkoshi <sup>2</sup>  
<sup>1</sup>Graduate school of Science, Tokai University Graduate School, <sup>2</sup>School of Science, Tokai University
- P-85 Comparison of rapid detection methods for asbestos  
Yoji Yamaguchi <sup>1</sup>, Hiroyuki Funaoka <sup>1</sup>  
<sup>1</sup>Kankyo Research Co., Ltd.
- P-86 Practical application of the portable aerosol mobility spectrometer (PAMS)  
Yasuhiro Nakamura <sup>1</sup>, Yusuke Ogihara <sup>1</sup>, Yohei Hayakawa <sup>1</sup>, Nobuhiko Fukushima <sup>1</sup>  
<sup>1</sup>Kanomax Japan INC.

Oral Session (Room A: Urban Tech Hall, December 6th, 9:00~15:30)

[Field Study of Hospitals, Elderly Facilities, Schools and Houses]

Chair Hoon Kim (9:00~10:15)

- A-01 Prototype model of PM2.5 dust monitor and onsite measurements in hospitals  
Kouki Ishimoto<sup>1</sup>, Yusuke Ogihara<sup>1</sup>, Masahiro Nakajima<sup>1</sup>, Naoki Kaneyasu<sup>2</sup>,  
Yoshihiro Noda<sup>3</sup>, Kenzo Matsuo<sup>4</sup>  
<sup>1</sup>Kanomax Japan INC., <sup>2</sup>National Institute of Advanced Industrial Science and Technology  
<sup>3</sup>Tokyo Metropolitan Institute of Gerontology, <sup>4</sup>HIGASHIDA CLINIC
- A-02 Risk of contact infection due to contaminated surfaces with droplet in a hospital room  
Hitomi Tsutsumi<sup>1</sup>, Shin-ichi Tanabe<sup>2</sup>, Shoichi Morimoto<sup>3</sup>, Satoshi Hori<sup>4</sup>  
<sup>1</sup>Showa Women's University, <sup>2</sup>Waseda University, <sup>3</sup>Shinryo Corporation, <sup>4</sup>Juntendo University
- A-03 Evaluation of ventilation control by semiconductor-based sensor in the ward  
Makoto Yamaguchi<sup>1</sup>, Risa Kawakami<sup>1</sup>, Toshihiro Otsuka<sup>1</sup>, Kazuyuki Tomioka<sup>1</sup>  
<sup>1</sup>Shimizu Corporation
- A-04 Field measurements of airborne particle in residences  
Naoki Kagi<sup>1</sup>, Mami Aikawa<sup>1</sup>, Shuji Fujii<sup>1</sup>  
<sup>1</sup>Tokyo Institute of Technology
- A-05 Annual meeting of the society of indoor environment, Japan  
Yuji Suyama<sup>1</sup>  
<sup>1</sup>Health Safety and Environmental Research Institute, Japan

Chair Naoki Kagi (10:15~11:15)

- A-06 Experimental study on lighting environment in patient room depending on daylight from window  
Part 1 Outline of the subjective experiment and evaluation of the lighting environment  
Yuta Hamada<sup>1</sup>, Etsuko Mochizuki<sup>1</sup>, Kaori Oshima<sup>2</sup>, Yukitada Murae<sup>2</sup>, Takuto Yoneyama<sup>1</sup>,  
Maho Namita<sup>1</sup>, Takahiko Suzuki<sup>2</sup>, Hiroyuki Niwa<sup>3</sup>  
<sup>1</sup>Chiba Institute of Technology, <sup>2</sup>Toda Corporation, <sup>3</sup>Murata Manufacturing Co., Ltd.
- A-07 Experimental study on lighting environment in patient room depending on daylight from window  
Part 2 Physiological effects by lighting environment  
Kaori Oshima<sup>1</sup>, Yukitada Murae<sup>1</sup>, Yuta Hamada<sup>2</sup>, Etsuko Mochizuki<sup>2</sup>, Takuto Yoneyama<sup>2</sup>,  
Maho Namita<sup>2</sup>, Takahiko Suzuki<sup>1</sup>, Hiroyuki Niwa<sup>3</sup>  
<sup>1</sup>Toda Corporation, <sup>2</sup>Chiba Institute of Technology, <sup>3</sup>Murata Manufacturing Co., Ltd.
- A-08 Proposal of lighting method retaining both teachers' brightness sensation and energy saving in elementary school  
Takayuki Hakoda<sup>1</sup>, Kotomi Tei<sup>2</sup>, Toshihiro Takei<sup>2</sup>, Etsuko Mochizuki<sup>2</sup>, Naoyuki Suzuki<sup>3</sup>  
<sup>1</sup>Graduate student, Chiba Institute of Technology, <sup>2</sup>Chiba Institute of Technology, <sup>3</sup>ENDO Lighting Corporation

- A-09 Evaluation of task and ambient lighting environment in office  
- Comparison of LED task lighting and OLED task lighting -  
Daisuke Oikawa <sup>1</sup>, Gen Akishige <sup>1</sup>, Kenta Yoshiki <sup>1</sup>, Etsuko Mochizuki <sup>2</sup>,  
Kazuyoshi Harimoto <sup>3</sup>, Tadashi Katsume <sup>4</sup>, Yoshiyuki Fukatsu <sup>5</sup>  
<sup>1</sup>Graduate School of Chiba Institute of Technology, <sup>2</sup>Chiba Institute of Technology  
<sup>3</sup>Taisei Corporation, <sup>4</sup>Mitsubishi Heavy Industries, <sup>5</sup>Okamura Corporation

## [Bio Contamination]

### Chair Sumiyo Ishimatsu (11:15~12:00)

- A-10 Distribution investigation of *aspergillus fumigatus* on farmland and house creation ground that is adjacent to residential quarter <part 2>  
Hisayuki Oda <sup>1</sup>, Yuji Kawami <sup>1</sup>, Kazuhiro Hashimoto <sup>1</sup>  
<sup>1</sup>Laboratory of Environmental Science, FCG Research Institute, Inc.
- A-11 A Survey on the isolation of house dust mites, insects and fungi from house dust of bedroom in general residences  
Yuji Kawakami <sup>1</sup>, Kazuhiro Hashimoto <sup>1</sup>, Hisayuki Oda <sup>1</sup>, Noriko Koyama <sup>2</sup>, Keiko Akano <sup>2</sup>, Takashi Nishizawa <sup>2</sup>, Toby BASEY-FISHER <sup>2</sup>, Nobuhiro Asano <sup>2</sup>, Yuma Fukutomi <sup>3</sup>  
<sup>1</sup>Laboratory of Environmental Science, FCG Research Institute, Inc., <sup>2</sup>Dyson Limited, <sup>3</sup>Clinical Research Center for Allergy and Rheumatology, Sagamihara National Hospital
- A-12 Preventive strategy against fungal contamination in given storerooms  
Keiko Abe <sup>1</sup>, Tomomi Murata <sup>2</sup>, Katsushi Nagayasu <sup>3</sup>, U Yanagi <sup>4</sup>  
<sup>1</sup>Institute of Environmental Biology, JDC Corporation, <sup>2</sup>The University of Kitakyushu  
<sup>3</sup>Amenity Technology Inc., <sup>4</sup>Kogakuin University

## [HVAC System]

### Chair Hitomi Tsutsumi (13:00~14:00)

- A-13 Characteristics of indoor thermal environment of the office of multi-package type air conditioning system  
Yasuyuki Yamazaki <sup>1</sup>, Tatsuo Nobe <sup>1</sup>  
<sup>1</sup>University of Kogakuin
- A-14 Comparison of Properties of Radiant Cooling System and General Air-conditioning System  
Masanori Ukai <sup>1</sup>, Hiroya Koh <sup>1</sup>, Yu Hashimoto <sup>1</sup>, Yoshito Arai <sup>2</sup>, Mitsuhiro Takahashi <sup>2</sup>, Sei Ito <sup>2</sup>, Saya Amemiya <sup>2</sup>, Tatsuo Nobe <sup>1</sup>  
<sup>1</sup>University of Kogakuin, <sup>2</sup>Shimizu Corporation
- A-15 The latest trends in thermal comfort standards  
Junta Nakano <sup>1</sup>  
<sup>1</sup>Tokai University
- A-16 The multiplication characteristic of the mold on basis material surface used for a packed type air-conditioner  
Riku Watanabe <sup>1</sup>, U Yanagi <sup>1</sup>  
<sup>1</sup>Kogakuin University

[Odor]

Chair Yusuke Ichijo (14:00~15:30)

- A-17 Basic study on olfactory adaptation - Study on individual olfactory adaptation to different odors - Ryota Takahashi<sup>1</sup> Toshio Yamanaka<sup>1</sup> Akihisa Takemura<sup>2</sup> Hisashi Kotani<sup>1</sup> Yoshihisa Momoi<sup>1</sup> Kazunobu Sagara<sup>1</sup>, Yuki Nagai<sup>3</sup>, Kyoko Yamada<sup>1</sup>  
<sup>1</sup>Osaka University, <sup>2</sup>Setsunan University, <sup>3</sup>West Japan Railway Company
- A-18 Comparison between effects of preference of aroma about psychological and physiological states in mental workloads - Case study of eucalyptus essential oil - Akihisa Takemura<sup>1</sup>  
<sup>1</sup>Setsunan University
- A-19 Studies on the odor substance pollution caused by the feces of the dog and cat Atsuo Nozaki<sup>1</sup>, Hisato Nishina<sup>2</sup>  
<sup>1</sup>Graduate school of Tohoku Bunka Gakuen University, <sup>2</sup>Tohoku Bunka Gakuen University,
- A-20 Study on emission of 2-ethyl-1-hexanol (2E1H) from polyvinyl chloride floorings Yukitada Murae<sup>1</sup>, Shigeru Kuriki<sup>1</sup>, Yuki Hosoya<sup>2</sup>  
<sup>1</sup>Toda Corporation, <sup>2</sup>Toli corporation
- A-21 Studies on effects of the deodorant or air freshener on indoor air pollutant (Part 1) Yasunori Narita<sup>1</sup>, Toshiki Sakuma<sup>2</sup>, Atsuo Nozaki<sup>2</sup>  
<sup>1</sup>Life science research laboratory, <sup>2</sup>Tohoku Bunka Gakuen University
- A-22 Odor environment and management in facilities for the elderly Hoon Kim<sup>1</sup>, Michiko Bando<sup>1</sup>, Haruki Osawa<sup>1</sup>, Motoya Hayashi<sup>1</sup>  
<sup>1</sup>National Institute of Public Health

Oral Session (Room B: 20<sup>th</sup> floor, The 6<sup>th</sup> meeting room, December 6th, 9:00~16:30)

[Air Cleaning]

Chair Yukitada Murae (9:00~10:30)

- B-01 Studies on the deterioration of contaminants removal performance of room air cleaners (Part 2)  
Tomoya Shoji<sup>1</sup>, Atsuo Nozaki<sup>1</sup>, Yusuke Ichijo<sup>2</sup>  
<sup>1</sup>Graduate school of Tohoku Bunka Gakuen university, <sup>2</sup>Tohoku Bunka Gakuen university
- B-02 Promotion of the standard evaluation method for the pollen removal efficiency of air purifiers  
Kenkichi Kagawa<sup>1</sup>  
<sup>1</sup>DAIKIN INDUSTRIES, LTD.
- B-03 Comparing the microbe removal performance between decay method and single pass method for an air purifying apparatus  
Fusako Yamatani<sup>1</sup>, U Yanagi<sup>1</sup>, Hiroshi Ida<sup>2</sup>, Satoko Haneda<sup>2</sup>, Shunsuke Sejima<sup>3</sup>, Miyoko Endo<sup>3</sup>, Yoshio Nakanishi<sup>4</sup>  
<sup>1</sup>Kogakuin University, <sup>2</sup>NIHON SEKKEI, INC., <sup>3</sup>Bio Medical Science Association, <sup>4</sup>NIPPON PMAC CO., LTD.
- B-04 Effect of crystal form of activated manganese dioxide on the oxidative decomposition of formaldehyde at room temperature  
Yuki Nagaoka<sup>1</sup>, Yoshika Sekine<sup>1</sup>, Emu Kimura<sup>2</sup>  
<sup>1</sup>Graduate School of Science, Tokai University, <sup>2</sup>Japan Metals & Chemicals Co., Ltd.
- B-05 Study of precipitation, deodorization and sterilization in six- mats space by atmospheric plasma  
Yusuke Kurokawa<sup>1</sup>, Marius Blajan<sup>2</sup>, Kazuo Shimizu<sup>2</sup>  
<sup>1</sup>Graduate School of Engineering, Shizuoka University, <sup>2</sup>Organization for Innovation and Social Collaboration, Shizuoka University
- B-06 Effect prediction by installation of air cleaner simulating odor concentration  
Eizo Murakami<sup>1</sup>, Norikazu Namiki<sup>2</sup>, Naoki Kagi<sup>3</sup>  
<sup>1</sup>Asahi Kogyosha Co., Ltd., <sup>2</sup>Kogakuin University, <sup>3</sup>Tokyo Institute of Technology

[Analysis Method]

Chair Makoto Yamaguchi (10:30~11:15)

- B-07 Development of novel passive air sampler for simultaneous measurement of NO and NO<sub>2</sub> employing ceria as oxidative trapping media  
Ayano Azuma<sup>1</sup>, Yoshika Sekine<sup>1</sup>, Michio Butsugan<sup>2</sup>, Keita Sakurai<sup>2</sup>  
<sup>1</sup>Graduate School of Science, Tokai University, <sup>2</sup>Hitachi Chemical Techno Service Co., Ltd.
- B-08 Measurement of neonicotinoid insecticides and triazole wood preservatives in indoor environment  
Ikue Saitou<sup>1</sup>, Aya Onuki<sup>1</sup>, Mitsugu Hosaka<sup>1</sup>, Dai Nakae<sup>1</sup>  
<sup>1</sup>Tokyo Metropolitan Institute of Public Health

- B-09 Passive sampling for total-volatile organic compounds (TVOC) in indoor air (Part 1)  
Takahiro Ishizaka <sup>1</sup>, Shiniciro Yamada <sup>1</sup>, Ayato Kawashima <sup>1</sup>  
<sup>1</sup>Faculty of Agriculture Ehime University

### [Tobacco Smoke]

#### Chair Naohide Shinohara (11:15~12:00)

- B-10 Behavior of nicotine in tobacco smoke and the sampling method  
Miyuki Noguchi <sup>1</sup>, Chikara Kumon <sup>1</sup>, Akihiro Yamasaki <sup>1</sup>  
<sup>1</sup>Department of Materials and Life Science, Faculty of Science and Technology, Seikei University
- B-11 Study of the collection of nicotine from smoking by the sampler using electric FAN, and for SVOC collected by this technique  
Yoshihiro Suzuki <sup>1</sup>, Fumiko Tanaka <sup>1</sup>, Yasuhiro Fukushima <sup>1</sup>, Miyuki Noguchi <sup>2</sup>,  
Akihiro Yamazaki <sup>2</sup>  
<sup>1</sup>SIBATA Sci. Tech. Ltd., <sup>2</sup>Seikei University
- B-12 Evaluation of dynamic behaviors of environmental tobacco smoke at the interface where a swinging door with louvers is open or closed  
Kohei Sakata <sup>1</sup>, Tetsuya Yamada <sup>1</sup>, Namiki Norikazu <sup>1</sup>, Naoki Kagi <sup>2</sup>  
<sup>1</sup>Kogakuin University, <sup>2</sup>Tokyo Institute of Technology

### [Disaster Affected Houses]

#### Chair Yoshika Sekine (14:00~15:00)

- B-13 A research study on the accidents during use of the kerosene space heaters  
Mayuko Ueno <sup>1</sup>, Atsuo Nozaki <sup>1</sup>, Hisato Nishina <sup>2</sup>  
<sup>1</sup>Graduate school of Tohoku Bunka Gakuen university, <sup>2</sup>Tohoku Bunka Gakuen University
- B-14 A study on indoor air environment of the house in the areas stricken by the great east Japan earthquake in 2011 (Part 3)  
Atsuo Nozaki <sup>1</sup>, Yusuke Ichijo <sup>2</sup>, U Yanagi <sup>3</sup>, Naoki Kagi <sup>4</sup>, Yasunori Narita <sup>5</sup>,  
Hiroshi Yoshino <sup>6</sup>  
<sup>1</sup> Graduate school of Tohoku Bunka Gakuen university, <sup>2</sup>Tohoku Bunka Gakuen university,  
<sup>3</sup>Kogakuin University, <sup>4</sup>Tokyo Institute of Technology, <sup>5</sup>Life science research laboratory,  
<sup>6</sup>Tohoku University
- B-15 A research study on the actual condition of the spatial radiation dose rate at a rural house in Namie In Fukushima  
Atsuo Nozaki <sup>1</sup>, Hikaru Kobayashi <sup>2</sup>, Yusuke Ichijo <sup>1</sup>, Hisato Nishina <sup>1</sup>, Yasunori Narita <sup>3</sup>,  
Yoshio Hijikata <sup>4</sup>, Tomonobu Goto <sup>2</sup>, Hiroshi Yoshino <sup>2</sup>  
<sup>1</sup>Tohoku Bunka Gakuen University, <sup>2</sup>Tohoku University, <sup>3</sup>Life science research laboratory,  
<sup>4</sup>Nihon University

- B-16 Indoor air quality and climate of emergency temporary housings in Aso City, Kumamoto  
Asako Hasegawa <sup>1</sup>, U Yanagi <sup>2</sup>, Naoki Kagi <sup>3</sup>, Ken-ichi Hasegawa <sup>4</sup>, Naohide Shinohara <sup>5</sup>,  
Keiko Abe <sup>6</sup>, Hiroshi Yoshino <sup>7</sup>  
<sup>1</sup>Kumamoto University, <sup>2</sup>Kogakuin University, <sup>3</sup>Tokyo Institute of Technology, <sup>4</sup>Akita Prefectural  
University, <sup>5</sup>National Institute of Advanced Industrial Science and Tech., <sup>6</sup>Institute of  
Environmental Biology, <sup>7</sup>Tohoku University

## [Health effects]

### Chair Atsuo Nozaki (15:00~15:45)

- B-17 Study on estimation of dampness from occupants' self-reported questionnaire  
Kenichi Hasegawa <sup>1</sup>, Naoki Kagi <sup>2</sup>, Jun Sakaguchi <sup>3</sup>, Naohide Shinohara <sup>4</sup>,  
Yasuyuki Shiraishi <sup>5</sup>, Teruaki Mitamura <sup>6</sup>  
<sup>1</sup>Akita Prefectural University, <sup>2</sup>Tokyo Institute of Technology, <sup>3</sup>University of Niigata Prefecture,  
<sup>4</sup>National Institute of AIST, <sup>5</sup>The University of Kitakyushu, <sup>6</sup>Maebashi Institute of Technology
- B-18 Health risk assessment of indoor air pollutants: nationwide survey in dwellings in Japan  
Kenichi Azuma <sup>1</sup>, Iwao Uchiyama <sup>2</sup>, Shigehisa Uchiyama <sup>3</sup>, Naoki Kunugita <sup>3</sup>  
<sup>1</sup>Department of Environmental Medicine and Behavioral Science, Kinki University Faculty of  
Medicine, <sup>2</sup>Kyoto University, <sup>3</sup>Department of Environmental Health, National Institute of Public  
Health
- B-19 Measurement of diffusion of flame retardants from plastic surface into simulated house dusts  
Kiyotaka Tsunemi <sup>1</sup>, Hirofumi Tanaka <sup>2</sup>  
<sup>1</sup>National Institute of Advanced Industrial Science and Technology, <sup>2</sup>MC Evolve Technologies  
Corporation

## [Measuring method]

### Chair Norikazu Namiki (15:45~16:30)

- B-20 Development of a portable monitor for formaldehyde and nitrogen dioxide  
Yasuhiro Terauchi <sup>1</sup>, Seiichi Ootani <sup>1</sup>  
<sup>1</sup>Riken Keiki Co., Ltd.
- B-21 Monitoring of air pollutants (PM2.5 and ozone) in indoor environment using multi sensor  
systems  
Michio Ushigome <sup>1</sup>, Osamu Tsuboi <sup>1</sup>, Masatoshi Takenouchi <sup>2</sup>  
Fujitsu Laboratories LTD. <sup>1</sup>Green Platform Laboratories, <sup>2</sup>Social Innovation Laboratories
- B-22 Change in gas concentration in museum display case  
Tomoko Kotajima <sup>1</sup>, Toshitami Ro <sup>1</sup>, Ryosuke Hayashi <sup>2</sup>, Masaharu Suga <sup>2</sup>, Chie Sano <sup>1</sup>  
<sup>1</sup>National Research Institute for Cultural Properties, Tokyo, <sup>2</sup>Okamura Corporation